Filing Date: February 25, 2004

Title: METHOD AND SYSTEM FOR CORRELATING AND COMBINING PRODUCTION AND NON-PRODUCTION DATA FOR

ANALYSIS

REMARKS

This paper responds to the Office Action mailed on September 14, 2006.

Claims 18-20, 43-45 and 78-80 are amended, claims 6, 16, 22, 31, 41 and 71 are canceled, and no claims are added; as a result, claims 1-5, 7-10, 12-15, 17-20, 23-30, 32-35, 37-40, 42-70 and 72-105 are now pending in this application. Applicant submits that no new matter has been added.

Applicant further informs the Examiner that two co-pending applications have published as 2006/0250906 and 2006/0259177.

Objection to the Applicant's Amendment Filed 6/26/06

The Office Action objected alleged new matter added to the disclosure that was contained within the amendment filed on June 26, 2006. Applicant disagrees. The amendment was made merely to replace attorney's docket number with the application serial number for a co-pending application commonly assigned. Additionally, a clerical error was introduced in the originally filed application which referenced this present application. Applicant's intent was to reference the co-pending application that is now correctly identified. In a Communication Concerning Related Application(s) filed in the present matter by the Applicant on May 25, 2004, the related application was identified. Applicant submits that the originally filed application was in error, and that the amendment objected to, merely corrects that error and no new matter was intended to be added by the Applicant by that amendment. Applicant respectfully requests the withdrawal of the objection and the entering of the amendment.

Objection to the Specification

The specification was objected to for informalities.

Applicant amends the table on Page 12 to correspond to the paragraph beginning at page 12, line 3. Applicant directs attention to the previously filed response, where the paragraph beginning at page 12, line 3 was amended. The amendment to the table makes the table and the description consistent. Applicant asserts that no new matter has been added by way of this

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

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amendment. With respect to claims 19, 20, 44, 45 and etc, Applicant disagrees with the assertion that the variable is not defined, as the variable is defined within the claim as ", tSx is the time of the most recent facility data sampling, tS_{X+1} is the time of the next consecutive facility data sampling," as recited in part in claim 19. With reference to table A, it is plain what this variable is intended to be. The variable in the claim merely expresses it in the general sense as the time one sample was taken (x) and the time the next consecutive sample was taken (x+1). Applicant requests withdrawal of the objection.

Declaration and Power of Attorney

A new oath or declaration was required in compliance with 37 C.F.R. 1.67(a). As Applicant has communicated to the Examiner telephonically, one of the named inventors has deceased since the execution of the originally filed declaration. Applicant notes that, in accordance with MPEP § 602.03, the Examiner can waive a minor deficiency in the oath or declaration. Applicant submits that the wording of the originally filed oath or declaration constitutes a minor deficiency and requests that the deficiency be waived. Absent a waiver of the minor deficiency. Applicant is presently locating an authorized representative of that inventor so that a corrected Declaration can be executed and filed, and such corrected Declaration will be filed forthwith once it is received.

§101 Rejection of the Claims

Claims 1-10, 12-20, 22-35 and 37-60 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

The Office has deemed that claims 1-10, 12-20, 22-35 and 37-60 fall outside of statutory categories. Applicant respectfully submits that all claims 1-10, 12-20, 22-35 and 37-60 fall within one of the statutory categories enumerated in §101. Independent claims 1, 9, 17, 23, 26, 26, 34, 42, 48 and 55 are directed to novel methods (process category). According to the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility:

[t]he burden is on the USPTO to set forth a prima facie case of unpatentability. Therefore if the examiner determines that it is more likely

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than not that the claimed subject matter falls outside all of the statutory categories, the examiner must provide an explanation.

With proper analysis, the claims 1-10, 12-20, 22-35 and 37-60 should be considered as directed to statutory subject matter. It should be obvious that the method claims fall within the process category of §101. After determining that a claim falls under the process category of §101, one should then determine whether the process is directed to nothing more than abstract ideas, such as mathematical algorithms, natural phenomena, or laws of nature. See Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, Section IV. Under these Guidelines, only if a process claim is directed to an abstract idea (or law of nature or natural phenomena, not applicable here), should the Examiner then determine whether the claim falls within a judicially-created exception requiring a "practical application," producing a useful, tangible, and concrete result. However, a reasonable and correct analysis cannot deem the method claims 1, 9, 17, 23, 26, 26, 34, 42, 48 and 55 as directed to any one of abstract ideas (such as mathematical algorithms), natural phenomena, or laws of nature. Thus, in accordance with the Guidelines, upon determining that the method claims are process category claims that are not directed solely to mathematical algorithms, natural phenomena, or laws of nature, then the analysis is complete and the Examiner should conclude that the claims 1, 9, 17, 23, 26, 26, 34, 42, 48 and 55 are directed to statutory subject matter falling within the process category of §101.

None of the claims 1-10, 12-20, 22-35 and 37-60 can reasonably be characterized as directed to nothing more than abstract ideas, natural phenomena, or natural laws. The claims are not directed to a mathematical algorithm, a formula, or a calculation. Claim 1 recites "analyzing said single data set to determine conditions in the electronic device manufacturing process." The Office Action has not, and cannot, set forth a basis by which analyzing a data set to determine conditions is merely just a mathematical algorithm, formula, or calculation.

Even if claims 1, 9, 17, 23, 26, 26, 34, 42, 48 and 55 were to be erroneously considered to be directed to an abstract idea, the claims cannot reasonably be characterized as not producing a useful, concrete, and tangible result, since claim 1 recites "analyzing said single data set to determine conditions in the electronic device manufacturing process." In addition,

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characterization of claims 1 and 10 by the Office as abstract and not producing a tangible result cannot be reconciled against case law, such as In re Alappat. Applicant therefore respectfully requests withdrawal of the rejections, because the claims are not, in fact, directed only to abstract ideas. In addition, the claims, when performed, result in a determination as to the conditions in an electronic device manufacturing process, which is a useful, concrete, tangible result. After a reasonable and correct analysis, the Office should determine that all of the claims are directed to statutory subject matter. Applicant respectfully requests the rejections under §101 be withdrawn, since all of the independent claims are directed to statutory subject matter.

§112 Rejection of the Claims

Claims 1-10, 12-20 22-35, 37-70 and 72-105 were rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness.

Applicant amends the specification to remove the "what it is actually called" language that the Office Action alleges creates uncertainty as to what is claimed. Though Applicant disagrees with this assertion, Applicant chooses to amend the specification at this time in order to further prosecution of the present matter. With respect to the statement made in the Office Action on page 5, paragraph 2, regarding the meaning of page 3, lines 16-18 of the present application, Applicant disagrees. The equipment data described in the cited section is related directly to the manufacturing process and would be considered production data, and as stated, "equipment data can be combined with the production data."

Applicant requests withdrawal of the rejection under §112, second paragraph and allowance of the claims.

Documents Cited but Not Relied upon for this Office Action

Applicant need not respond to the assertion of pertinence stated for the references cited but not relied upon by the Office Action since these references are not made part of the rejections in this Office Action. Applicant is expressly not admitting to this assertion and reserves the right to address the assertion should it form part of future rejections.

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CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 349-9587 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

NAOKI TOYOSHIMA ET AL.

By their Representatives,

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CERTIFICATE UNDER 37 CFR § 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this day of January 2007.

Name

Signature